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ATTORNEY DOCKET NO. CONFIRMATION NO.

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO.

10/646,599 08/21/2003 Dawn White DWH-11902/29 9796

7590 09/20/2005 EXAMINER

John G. Posa SELLS, JAMES D

John G. Posa Gifford, Krass, Groh, Sprinkle, Anderson & Citkowski, P.C. 280 N. Old Woodward Ave., Suite 400 Birmingham, MI 48009-5394

ART UNIT PAPER NUMBER
1734

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)
	10/646,599	WHITE ET AL.
	Examiner	Art Unit
	James Sells	1734
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,		
WHICHEVER IS LONGER, FROM THE MAILING C - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	OATE OF THIS COMMUNICATI 136(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS fi e, cause the application to become ABANDO	ON. e timely filed rom the mailing date of this communication. DNED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on	<u>_</u> .	
2a) This action is FINAL . 2b) ⊠ This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>1-18</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-18</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/	or election requirement.	
Application Papers		
9) The specification is objected to by the Examin	er.	
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
•	n priority under 35 H S.C. S.110)(a)-(d) or (f)
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:		
1.☐ Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview Summ	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mai	il Date al Patent Application (PTO-152)
 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 	6) Other:	ы шонет фриосион (г. 10-104)

Application/Control Number: 10/646,599

Art Unit: 1734

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Khoshnevis (US Patent 6,589,471).

Khoshnevis discloses a method and apparatus for manufacturing three-dimensional objects. The process 300 includes laying down a thin powder layer 310, depositing a sintering inhibitor 320, and sintering the powder later by radiation 340. Khoshnevis discloses several mechanisms for depositing the sintering inhibitor 320. They include: depositing a heat reflective material 600; depositing a heat-isolating material 610; depositing an anti-sintering agent 620 that oxidizes the metal powder such

Application/Control Number: 10/646,599 Page 3

Art Unit: 1734

as alcohol or oil; and depositing an isolating material such as a ceramic slurry and base powder of polymer, metal or ceramic (see col. 4, line 16 through col. 5, line 7).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U,S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 5-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khoshnevis as described above in paragraph 2.

Without the disclosure of unexpected results, it is the examiner's position that the specific materials, control features (i.e. analyzing the description and determining what would be appropriate) and consolidation technique are within the purview of one having ordinary skill in the art and would have been obvious to employ in the method and apparatus of Khoshnevis as a matter of design choice based on the physical requirements and properties of the articles being manufactured.

Specification

5. Applicant is requested to update the applications listed on page 1, lines 9-10 of the specification.

Telephone/Fax

Application/Control Number: 10/646,599 Page 4

Art Unit: 1734

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sells whose telephone number is (571) 272-

1237. The examiner can normally be reached on Monday-Friday between 9:30 AM and 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached at (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

JAMES SELLS PRIMARY EXAMINER TECH. CENTER 1700